

Efficacy of a Patient-Engagement Platform in Reducing Uncontrolled Hypertension in Community Health Clinics

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INTRODUCTION

- Nearly 40 million US adults have blood pressure (BP) higher than 140/90 mmHg, which can lead to serious sequelae like myocardial infarction and stroke.
- Approximately 50% of patients do not take medication as prescribed. One of the biggest challenges in hypertension (HTN) treatment is changing patient behavior to improve medication adherence.

OBJECTIVE

- We measured BP control rates before and after introduction of a digital HTN management program at federally qualified health centers (FQHCs).

METHODS

- 2,500 patients were treated for ≥90 days at 54 FQHCs from 13 states in this retrospective case series. The bilingual program nudged patients to measure BP at home and prioritized patient responses, allowing the clinic to more efficiently manage a population of hypertensive patients (**Figure 1**).
 1. Physician prescribed the program.
 2. Clinic staff member assisted patient in downloading app, provided BP cuff, and trained patient to use both.
 3. Patient received notifications on phone that provided education, asked patient to measure BP, and asked about medication adherence or symptoms.
 4. Responses instantaneously sent to clinic through an online portal with alerts, indicating any responses of concern and prioritizing responses for clinic staff.
- If patients entered a BP defined as a hypertensive emergency, they received immediate guidance to call the clinic or escalate care.

FUNDING AND DISCLOSURES

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1 IN 2 PATIENTS ACHIEVED BETTER BLOOD PRESSURE CONTROL USING REMOTE BILINGUAL PROGRAM

BLOOD PRESSURE CONTROL WAS EVEN HIGHER IN THE SPANISH-SPEAKING POPULATION AT 66%

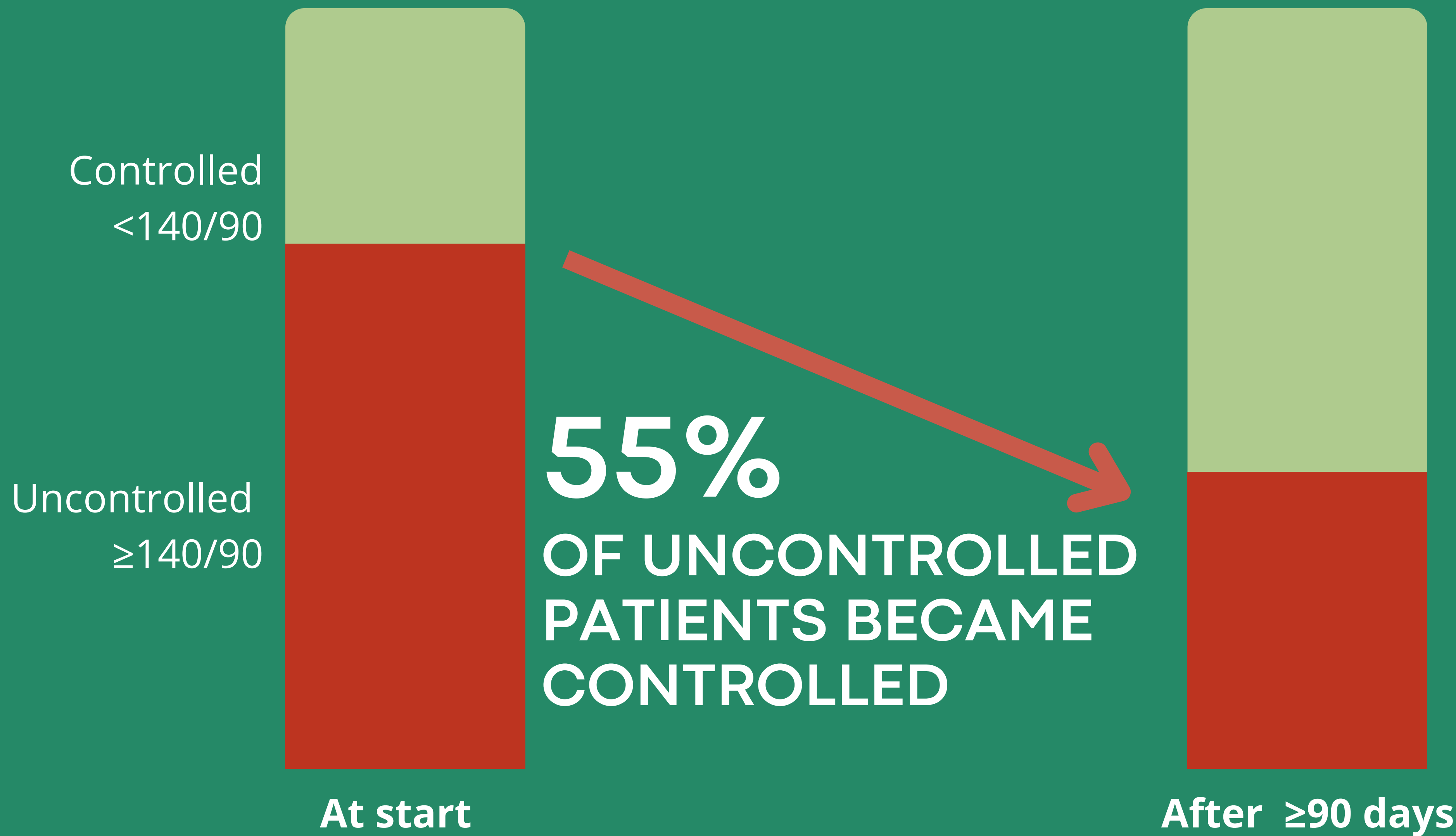


Figure 2: Decrease in uncontrolled BP, entire cohort

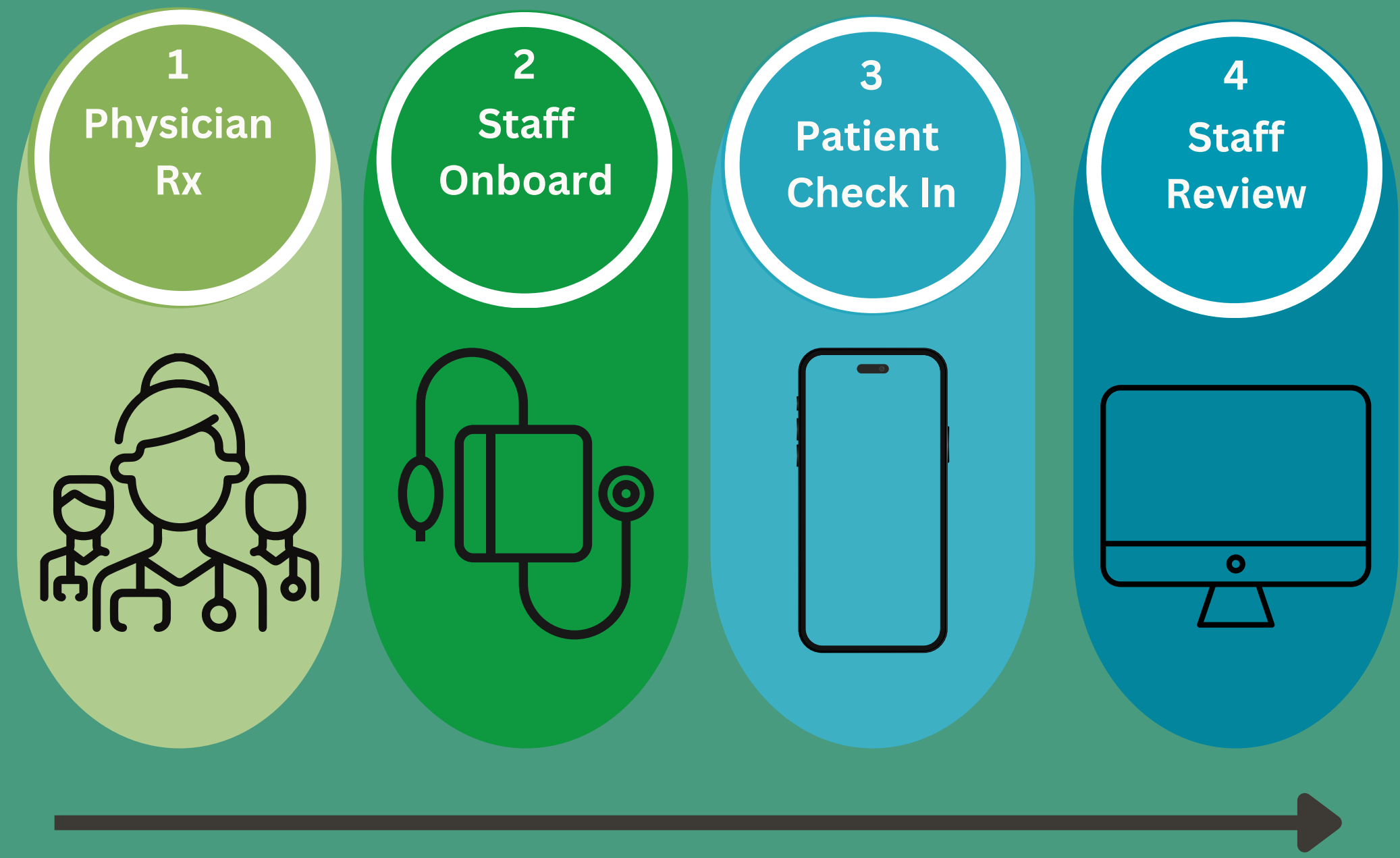


Figure 1: Digital HTN management program

RESULTS

- Overall, BP control (<140/90) improved from 31% to 61% from first to last BP reading, n=2,500.
- Of patients who started with an uncontrolled BP, 55% achieved a controlled BP on their last reading (**Figure 2**).
- 53% of patients who started with an uncontrolled BP using the English version ended with a controlled one, compared to 66% of those using the Spanish version, n=551 (**Figure 3**).

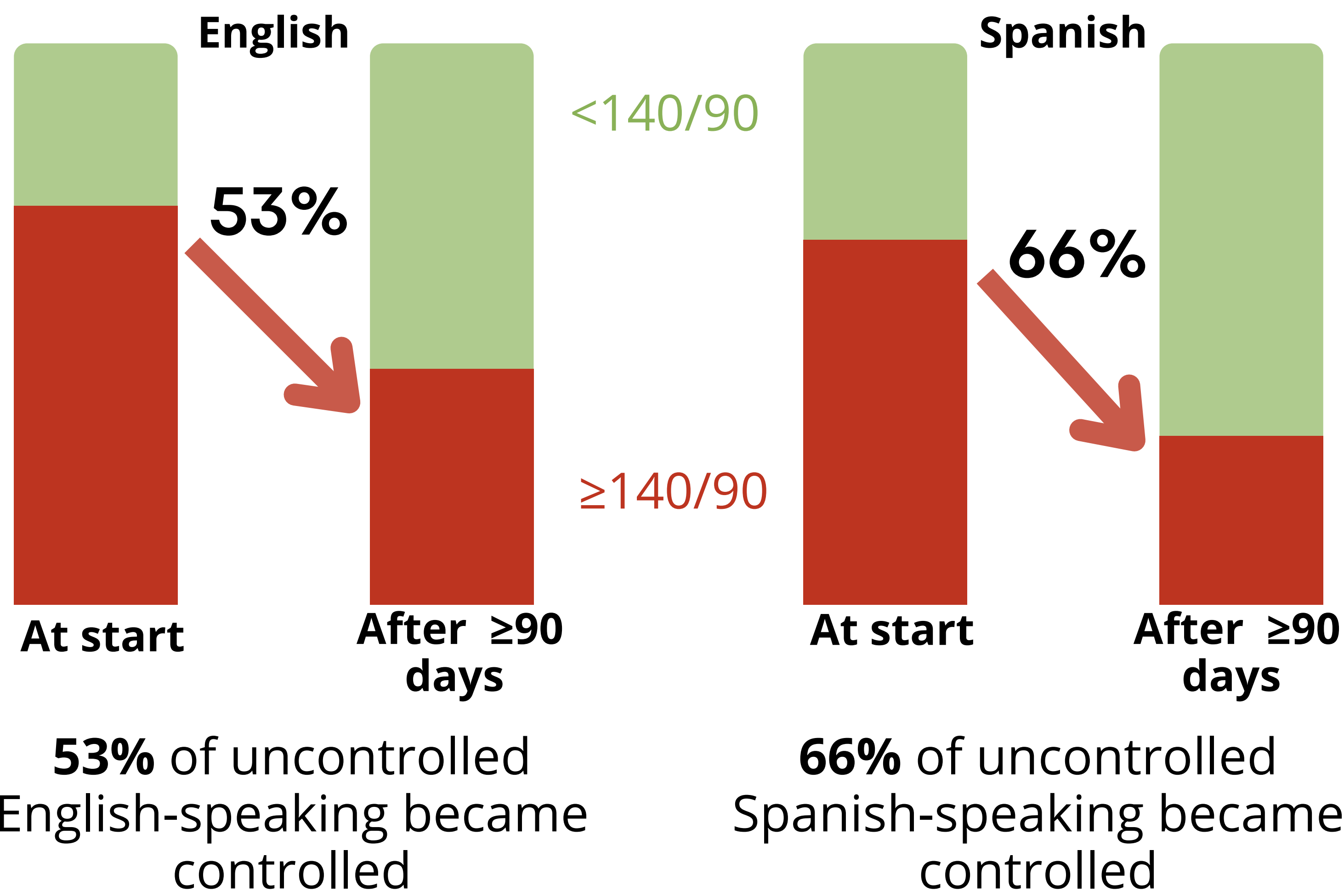


Figure 3: Patients using the Spanish version achieved better BP control

CONCLUSIONS

- This novel HTN management program, which used technology to gather and prioritize data, facilitating the clinic’s efficient response, improved BP control by over 50% in a real-world, underserved population with uncontrolled HTN.
- This program regularly reminded patients of their HTN, potentially making them more aware of and likely to treat the condition.